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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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03/10/2004

Krisztian Kiss

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918 Prince Street
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EXAMINER

BRANDT, CHRISTOPHER M

ART UNIT

PAPER NUMBER

2617

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DELIVERY MODE

03/01/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/797,491	Applicant(s) KISS ET AL.	
	Examiner CHRISTOPHER M. BRANDT	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>01/26/2011</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement submitted on January 26, 2011 has been considered by the examiner and placed of record in the application file.

Response to Amendment

This Action is in response to applicant's amendment/arguments submitted on December 20, 2010.

Response to Arguments

Applicant's arguments with respect to claims 24-43 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

Claims 34 and 41 are objected to because of the following informalities: It appears that applicants intended for dependent claims 34 and 41 to depend from dependent claims 33 and 40, respectively, since claims 34 and 41 refer to "the trigger in claims 33 and 40. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 24, 31, and 38 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the

Art Unit: 2617

relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 24, 31, and 38 each recite "direct subscription," however, the examiner was unable to find support for this particular term. As a result, the examiner was unable to find a definition or an example as to what "direct subscription" specifically relates to. If applicants disagree with position, the examiner respectfully request applicants to provide the examiner with page and line citation for support of this term.

Claims 25-30, 32-37, and 39-43 are also rejected as depending from independent claims 24, 31, and 38.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 24, 26-28, 30, 31, 33-35, 37, 38, and 40-42 are rejected under 35 USC 103(a) as being unpatentable over **Leung et al. (US PG PUB 2003/0165121 A1, hereinafter Leung)** in view of **Zhao et al. (US PG PUB 2008/0153500 A1, hereinafter Zhao)**.

Consider **claim 24 (and similarly applied to claims 31 and 38)**. Leung discloses a method comprising:

causing, at least in part, registration of a network address assigned to the terminal associated with the first network in accordance with establishment of the data session (paragraphs 31, read as the gateway then applies an IP address and a port number, wherein the IP address identifies the NAT zone of the target recipient, and the port number identifies the user within that NAT zone, where the gateway allows applications on the Internet to push traffic to the user, without requiring the user to make a request for the information);

causing, at least in part, transmission of the push content over the first network and via the network address translator or the firewall to the terminal (paragraph 31, read as the gateway sends packets to multiple NAT zones. Within each NAT zone, packets are processed through a PDSN to the MS.; and

causing, at least in part, transmission of subsequent push content through the network address translator or the firewall to the terminal based upon direct subscription to the push service by the terminal, the direct subscription occurring after de-registration and then re-registration of the terminal (paragraphs 29, 31, read as the mobile station re-registers with the PUSH gateway whenever it roams into a different NAT zone. The gateway may send packets to multiple NAT zones. Within each NAT zone, packets are processed through a PDSN to the MS. It is noted that de-registration occurs when the mobile station moves away from a NAT zone and then has to re-register once returning. The examiner further notes that Leung teaches an apparatus (abstract) and a storage medium for carrying instructions executed by a processor (paragraph 44)).

Leung discloses the claimed invention but fails to explicitly teach determining to generate a request for a subscription to a push service over a first network on behalf of a terminal in a second network to obtain push content and determining to initiate establishment of a data session with the terminal in response to receiving the request.

However, Zhao teaches determining to generate a request for a subscription to a push service over a first network on behalf of a terminal in a second network to obtain push content and determining to initiate establishment of a data session with the terminal in response to receiving the request (paragraphs 29, 39, 40, 44, read as a wireless data device that operates in a Code Division Multiple Access (CDMA2000) mixed circuit switched and packet switched network, a Public Switched Telephone Network (PSTN), Internet and push servers, where the other apparatus is read as the wireless data device and the apparatus is read as the push server,

where the push server acts on behalf the wireless data device and the push server commences serving the wireless data device based on the data active message).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Zhao into the invention of Leung in order to reduce data traffic on the wireless network to save network resources.

Consider **claims 26, 33, and 40 and as applied to claims 24, 31, and 38, respectively.** Leung and Zhao disclose causing, at least in part, transmission of a trigger to the terminal over a communication channel independent of the network address translator or the firewall, in response to receiving subsequent push content in accordance with the push service; and causing, at least in part, re-registration of the terminal after the transmission of the trigger (Leung; paragraphs 29, 30).

Consider **claims 27, 34, and 41 and as applied to claims 26, 31, and 38, respectively.** Leung and Zhao disclose causing, at least in part, transmission of the subsequent push content over the first network and via the network address translator or the firewall to the terminal based upon the re-registration, wherein the trigger includes a globally unique identifier of the terminal (Leung; paragraphs 29, 30).

Consider **claims 28, 35, and 42 and as applied to claims 24, 31, and 38, respectively.** Leung and Zhao disclose receiving the push content from the push service, before or after registering the network address assigned to the terminal (Leung; paragraph 31).

Consider **claim 30 and as applied to claim 24.** Leung and Zhao disclose wherein the push service is originated from the first network or a third network connected to the first network via another network address translator or another firewall (Leung; paragraphs 32, 33).

Consider **claim 37 and as applied to claim 31**. Leung and Zhao disclose wherein the apparatus comprises a session initiation (SIP) proxy, the first network is a public network, and the second network is a private network (Leung; paragraph 30).

Claims 25, 32, and 39 are rejected under 35 USC 103(a) as being unpatentable over **Leung et al. (US PG PUB 2003/0165121 A1, hereinafter Leung)** in view of **Zhao et al. (US PG PUB 2008/0153500 A1, hereinafter Zhao)** and further in view of **O'Rourke et al. (US Patent 7,089,328 B1, hereinafter O'Rourke)**.

Consider **claims 25, 32, and 39 and as applied to claims 24, 31, and 38, respectively**. Leung and Zhao disclose the claimed invention but fail to explicitly teach causing, at least in part, de-registration of the terminal by removing the terminal from the registration associated with the data session, removing the terminal from a translation table of the network address translator or firewall, making the terminal enter into an idle mode, or a combination thereof.

However, O'Rourke teaches causing, at least in part, de-registration of the terminal by removing the terminal from the registration associated with the data session, removing the terminal from a translation table of the network address translator or firewall, making the terminal enter into an idle mode, or a combination thereof (column 4 lines 41-51).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of O'Rourke into the invention of Leung and Zhao in order to provide a NAT that consumes fewer resources and yet provides faster performance.

Claims 29, 36, and 43 are rejected under 35 USC 103(a) as being unpatentable over **Leung et al. (US PG PUB 2003/0165121 A1, hereinafter Leung)** in view of **Zhao et al. (US PG PUB 2008/0153500 A1, hereinafter Zhao)** and further in view of **Das et al. (US PG PUB 2001/0036834 A1, hereinafter Das)**.

Consider **claims 29, 36, and 43 and as applied to claims 27, 34, and 41, respectively**.
Leung and Zhao disclose the claimed invention but fail to explicitly teach receiving the subsequent push content from the push service, before the re-registration of the terminal.

However, Das teaches receiving the subsequent push content from the push service, before the re-registration of the terminal (paragraph 39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Das into the invention of Leung and Zhao in order to reduce update latency, thereby reducing handoff latency and minimize packet losses as a mobile node moves about the network.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2617

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street

Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Brandt whose telephone number is (571) 270-1098.

The examiner can normally be reached on 7:30a.m. to 5p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

/Christopher M Brandt/

Examiner, Art Unit 2617

February 20, 2011